

INTRODUCTORY COMMENTS

This is in response to the non-final Office Action dated April 27, 2009, for which a response is due on July 27, 2009. Accordingly, this response is timely filed. Reconsideration and allowance of the pending claims, as amended, in light of the remarks presented herein are respectfully requested.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 7 of this paper.

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-17 (cancelled)

Claim 18 (currently amended): A carrier structure for a reflector element, for use in a solar energy reflector system, and which comprises:

a reflector element;

a platform which is arranged to carry the reflector element and which is formed with stiffening elements;

a frame structure supporting the platform, wherein the frame structure comprises a space frame;

at least one curved transverse frame member; and

a mounting [[means]] arrangement supporting the frame structure in a manner that accommodates turning of the carrier structure about an axis of rotation that lies substantially coincident with a longitudinal axis of the reflector element when mounted to the platform,

wherein the platform is secured to the at least one curved transverse frame member in a manner such that the curvature of the at least one curved transverse frame member is imparted to the platform, and

wherein the reflector element is secured to the platform in a manner such that the curvature of the platform is imparted to the reflector element.

Claim 19 (previously presented): The carrier structure as claimed in claim 18 wherein the platform comprises a corrugated metal panel, with the corrugations forming the stiffening elements, and wherein the reflector element is supported upon the crests of the corrugations.

Claim 20 (previously presented): The carrier structure as claimed in claim 18 wherein the platform comprises a panel-like platform, wherein the stiffening elements are formed as flutes in the platform and wherein the reflector element is supported upon crests of the flutes.

Claim 21 (previously presented): The carrier structure as claimed in claim 19 wherein the stiffening elements are orientated to extend in a direction parallel to the axis of rotation.

Claim 22 (previously presented): The carrier structure as claimed in claim 18 wherein the platform is curved concavely in a direction orthogonal to the axis of rotation.

Claim 23 (previously presented): The carrier structure as claimed in claim 22 wherein the platform is curved with a radius of curvature within the range of 20 to 50 metres.

Claim 24 (canceled)

Claim 25 (currently amended): The carrier structure as claimed in claim 18 wherein the reflector element ~~is mounted to the platform and~~ comprises a panel-shaped glass mirror.

Claim 26 (currently amended): The carrier structure as claimed in claim 18 wherein the reflector element ~~is mounted to the platform and~~ comprises a plurality of edge-abutting glass mirrors.

Claim 27 (currently amended): The carrier structure as claimed in claim [[24]] 18 wherein the reflector element is adhered to the platform.

Claim 28 (previously presented): The carrier structure as claimed in claim 18 wherein the frame structure comprises hoop-like end members that extend about the axis of rotation of the carrier structure and wherein the platform extends in the longitudinal direction between the end members.

Claim 29 (currently amended): The carrier structure as claimed in claim 28 wherein the end members are supported for turning upon the mounting [[means]] arrangement.

Claim 30 (currently amended): The carrier structure as claimed in claim 28 wherein each said hoop-[[shaped]]like end member has a channel-section circumferential portion and a diametrically extending member that is constituted by [[a]] one of the curved transverse frame member of the platform members.

Claim 31 (currently amended): The carrier structure as claimed in claim 30 wherein the mounting [[means comprise]] arrangement comprises spaced-apart supporting rollers which track within the circumferential portion of associated ones of the end members.

Claim 32 (previously presented): The carrier structure as claimed in claim 28 and further comprising a drive system for imparting unidirectional turning drive to the carrier structure by way of at least one of the end members.

Claim 33 (previously presented): The carrier structure as claimed in claim 32 wherein the drive system comprises:

- a) a link chain that extends around and is fixed to the end member to form, in effect, a gear wheel;
- b) an electric motor; and
- c) a sprocket for transferring drive from the motor to the link chain.

Claim 34 (new): The carrier structure as claimed in claim 18, wherein the space frame comprises struts that connect at least one curved transverse frame member to a spine member.

Claim 35 (new): The carrier structure as claimed in claim 28, wherein each of the hoop-like end members has a diametrically extending member that is constituted by one of the curved transverse frame members, and wherein the space frame connects opposite end regions of each of the curved transverse frame members to a spine member.

Claim 36 (new): The carrier structure as claimed in claim 35, wherein the spine member interconnects the end members.

Claim 37 (new): The carrier structure as claimed in claim 28, wherein the mounting arrangement further comprises a hold-down roller which prevents the lifting of the end members.

Claim 38 (new): The carrier structure as claimed in claim 28, wherein two or more carrier structures are positioned linearly in a row and are connected to one to another by way of adjacent ones of the hoop-like end members.

Claim 39 (new): The carrier structure as claimed in claim 38 and further comprising a drive system for imparting unidirectional turning drive to the row of two or more carrier structures by way of at least one of the end members.

Claim 40 (new): A carrier structure for a reflector element, for use in a solar energy reflector system, and which comprises:

a platform which is arranged to carry the reflector element and which is formed with stiffening elements,

a frame structure supporting the platform, wherein the frame structure comprises a space frame, and wherein the frame structure comprises hoop-like end members that extend about the axis of rotation of the carrier structure and wherein the platform extends in the longitudinal direction between the end members, wherein each of the hoop-like end members has a channel-section circumferential portion, and

a mounting arrangement supporting the frame structure in a manner that accommodates turning of the carrier structure about an axis of rotation that lies substantially coincident with a longitudinal axis of the reflector element when mounted to the platform, wherein the end members are supported for turning upon the mounting arrangement, and wherein the mounting arrangement comprises spaced-apart supporting rollers which track within the circumferential portion of associated ones of the end members.